Managing Households With Recurrent Scabies

2014 EDITION

Breaking the cycle of recurrent scabies and skin sores
Introduction

Scabies and related skin sores and chronic diseases (rheumatic heart and renal disease) affect many children in remote communities and add to clinical workloads (e.g. data from Northern Australia showed 7 out of every 10 children had scabies before age 1).

For some of these children the infection will be very hard to clear requiring multiple scabies treatments and benzathine penicillin injections for resulting skin sores.

This document guides clinical and community staff on strategies to break the cycle of recurrent infections.

* Time spent on individual early case management of these children and households can lead to improved outcomes, interruption of transmission and reduced workload for clinics in the long run.

Case Management Approach to recurrent scabies

The reasons for recurrent scabies infections are complex and so a case management approach is needed to break the cycle.

It is most important not to blame the mother or extended family.

Do not label the mother or family non-compliant, to do so is to imply that the mother wants a sick child with poor looking skin.

Done well this public health activity can lead to rapid improvements in health and quality of life of the family and bring the family, community and health centre closer together.

*All clinical protocols in this guide are based on the CARPA Standard Treatment Manual 6th Ed. Please follow CARPA at all times.
If a patient has 3 or more presentations with scabies +/- sores over a period of 2 months we recommend investigating further.
Causes of recurrent scabies in a child despite treatment:

1. Treatment was not used correctly (i.e. full body application including hair/head, creams left overnight and re-applied if hands are washed, second treatment for cases one week later - not required in contacts).

2. All household cases AND contacts did not use the creams. Often only the child (and mother) and symptomatic contacts use creams but recurrences can occur from contacts without clinical scabies who are less likely to use treatment.

3. Household has an unmanaged case of crusted scabies.

4. Less common: Permethrin failure or transmission from bedding/clothes.

Assess causes of recurrence

Engage families in finding solutions

1. Where does the mother of the child sit in the family hierarchy? To ensure effective household treatment, a senior member of the household must be involved when developing treatment plan with child’s mother.

2. What other problems are going on within the family? It may be more effective to delay treatment day if there are other crises present.

3. Is the health hardware in the house working? Being an advocate with the Shire or Council to get critical health hardware fixed will build trust. It is important not to over-promise and to focus on broken taps, blocked toilets, blocked drains.

4. Explain to the mother, family members and particularly the senior member of the household, the importance of everyone using the scabies creams to break transmission and allow contacts to remain well.
Is there a known case of Crusted Scabies or a member of the family who may have it?

Ask:
- Community staff and long-term clinical staff at health centre if any household members have been diagnosed with crusted scabies or had recurrent treatments in hospital in the past

Check:
- Look for thickened, scaly skin patches — may be 1–2 areas (e.g. bottom, hands, feet, shoulders) or may cover whole body with thick/flaky crust.
- Scale may have distinctive creamy colour, even in dark skinned people.
- Can look like tinea, psoriasis, eczema, dermatitis.
- Often not itchy.

If crusted scabies is suspected — medical review as soon as possible

Crusted scabies is a highly infectious form of scabies that causes recurrent outbreaks of scabies in households and communities.

*See Managing Crusted Scabies Guide for detailed steps in diagnosis and treatment and contact the Infectious Disease team at Darwin or Alice Springs hospitals.
Considerations

- Repeated treatments and recurrences undermine confidence in the treatment and make future engagement harder.

- Therefore, where frequent treatments have been attempted, it may be appropriate to go straight to the more intensive but effective mini-skin day (see 3. above).
Select medications to use

Treat all of the household (scabies cases and contacts) on day 1
Repeat for scabies cases only (not contacts) in 1 week.

First line treatments;

**Permethrin 5%**
- Instructions on use of permethrin (as per CARPA scabies chapter).
- Do not use in child under 2 months (use crotamiton e.g. Eurax).
- Use in children 2 months and over and adults.
- Apply thin layer of permethrin 5% cream on whole body including head and face — avoid eyes, mouth.
- Requires overnight application.

**Benzyl Benzoate**
- Benzyl benzoate has a faster kill time than permethrin and is preferred. However, it can cause transient burning sensation in some patients so give warning and test on a patch of skin first.
- Instructions on use of benzyl benzoate 25% emulsion (as per CARPA scabies chapter).
- Apply topically to skin from the neck down and leave on overnight.
- Do not use in child under 2 years (use permethrin or if under 2 months use crotamiton e.g. Eurax cream).
- Child 2–12 years and sensitive adults — dilute with equal parts water (1:1).
- Adults – apply directly.
- Benzyl benzoate may occasionally cause severe skin irritation, usually resolves in 15 minutes.
- Before application, first test on small area of skin.

Consider;

**Ivermectin**
- Consider Ivermectin in males over age 5 (NB: STROMECTOL (ivermectin) is indicated for the treatment of human sarcoptic scabies when prior topical treatment has failed or is contraindicated. Treatment is only justified when the diagnosis of scabies has been established clinically and/or by parasitological examination. Without formal diagnosis, treatment is not justified in case of pruritus alone. At all times follow CARPA Guidelines.
- Comprehensive coverage is critical to effectiveness of control efforts. Certain groups in the house may not want to use creams, undermining control.
- Consult a medical officer to be part of the day to consider the use of ivermectin in men.

Note:
- Do not give to women (as ivermectin cannot be used during pregnancy and pregnancy testing is impractical in community control programs).
- Do not give to children under 5.

Dosing of ivermectin:
- 200mcg/kg rounded up to nearest 3mg.
- Contact with no clinical scabies-ivermectin Day 1 only
- Contact with suspected clinical scabies-ivermectin on Days 1 and 8.

* Make sure cream covers between fingers and toes, feet, including soles of feet, under nails, buttocks. Leave on overnight and advise to reapply after washing hands.
Making sure everyone joins in

The application of creams is inconvenient but ensuring all household members use the treatment is critical to the success. Make it a fun occasion and consider the following tips to get everyone involved.

Strategies for success

- Take time to get the support and interest of a senior household member. Explain benefits in terms of reduced sores and improved sleep. It is important to be flexible on the timing.
- Select a day and time when most of household will be present (e.g. after school in the afternoon).
- Involve senior members of household in helping others apply creams.
- Start the application of creams during the home visit. Start by involving mothers to apply creams on children.
- Often young children will be frightened. Start with an older person, apply on arms of mothers, staff to get things started. After initial reluctance a tipping point is reached where everyone joins in. The trick is to stay positive and keep going until you reach this point.
- Encourage older teens and adults to help each other with application. Highlight wearing creams as a sign of their support for household health and wellbeing.
- Ensure privacy and appropriate consent before applying creams. Parents should apply creams on children and be present at all times.
- Be discrete. The family may not want the whole community to know they are being treated for scabies.

Considerations

- Screen children and record names of children with scabies. Refer other conditions to health centre for treatment.
- If the family agrees, organise a clean-up for the house. If possible supply cleaning products and equipment.
- Encourage household to put bedding, clothes and mattresses in sun.
- If it is requested by the family, set insecticide bombs in the house (available over-the-counter in stores). Ensure families read and understand instructions.
- Avoid other health promotion or clinical activities while doing a mini skin day.
4. Household Treatment

Skin day checklist

Checklist:

1. Select appropriate day in consultation with senior members of the community.
2. Crusted scabies excluded.
3. Sufficient clinical staff attending on the day (2-3 staff per household).
4. Consumables to take: Permethrin, Benzyl benzoate (cups to mix BB 1:1 with tap water for children 2-12 years) and crotamiton cream, gloves, rubbish bags etc.
5. Sheet to record names of those with scabies to enter into health centre records. Use sheet to follow up for 2nd dose of treatment 1 week later.

And most importantly – have fun.
This is a recurrent and common disease that is associated with shame. Household treatment places a significant burden on families so focus on building rapport and engaging family members to take ownership.
If the scabies is resolved
- Make sure a good supply of permethrin is left with the family to treat visitors.
- Leave the cream with the family leader (e.g. senior female member).

If the scabies persists
- Visit the family at the home and discuss the treatment (what went well and what could be improved)
- Offer more scabies cream and promote the use of the cream with all contacts.
- Review previous steps to check if something else can be done to assist the family.
- If the scabies persists speak to a One Disease representatives for program guidance.
- At this stage it is more important than ever not to blame the family. In these cases there is normally something else going on and if that can be resolved the scabies will often be fixed by the family themselves. This may just take time and patience.

Problem solve with the family.
They are part of the treatment team.

Consider Healthy Skin Day
If many households have scabies
(see CDC Healthy Skin Program Guidelines and call One Disease for advice)
For clinical advice consult the CARPA standard treatment manual or infectious diseases specialists via the switchboards of Royal Darwin or Alice Springs hospitals.

For information on this document contact One Disease [www.1disease.org](http://www.1disease.org) or [contact@1disease.org](mailto:contact@1disease.org)

Useful Scabies Resources

NT CDC Healthy Skin Program Guidelines (planning a healthy skin day)

Flipchart – recognising and treating skin conditions (Menzies)

Developed by program strategy and implementation consultants, EveryVoiceCounts and the One Disease team.

Thanks to Prof. Bart Currie for expert advice and pictures used.

Approved by the medical reference group of the East Arnhem Scabies Control Program.